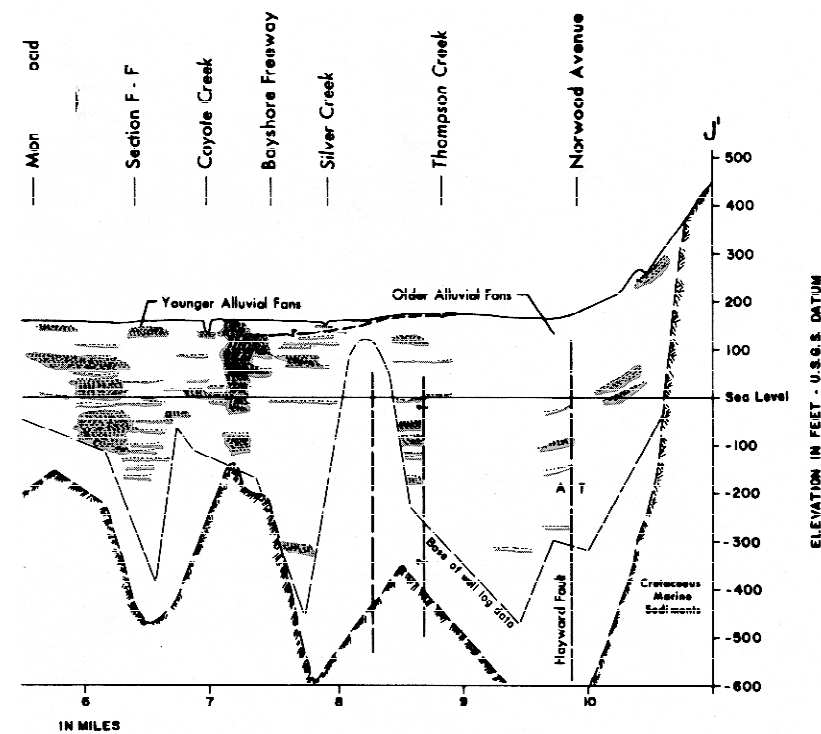
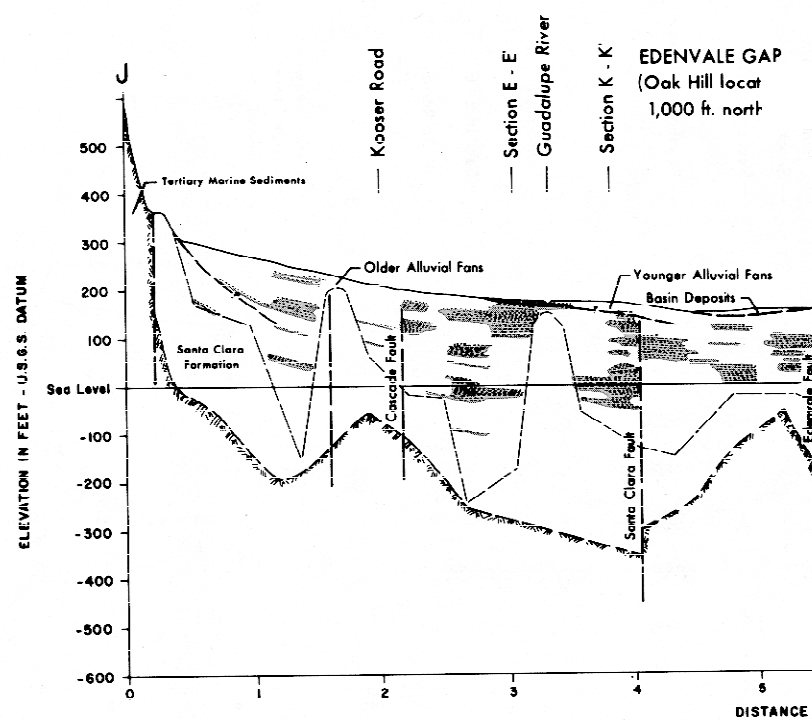


GEOLOGIC SECTIONS

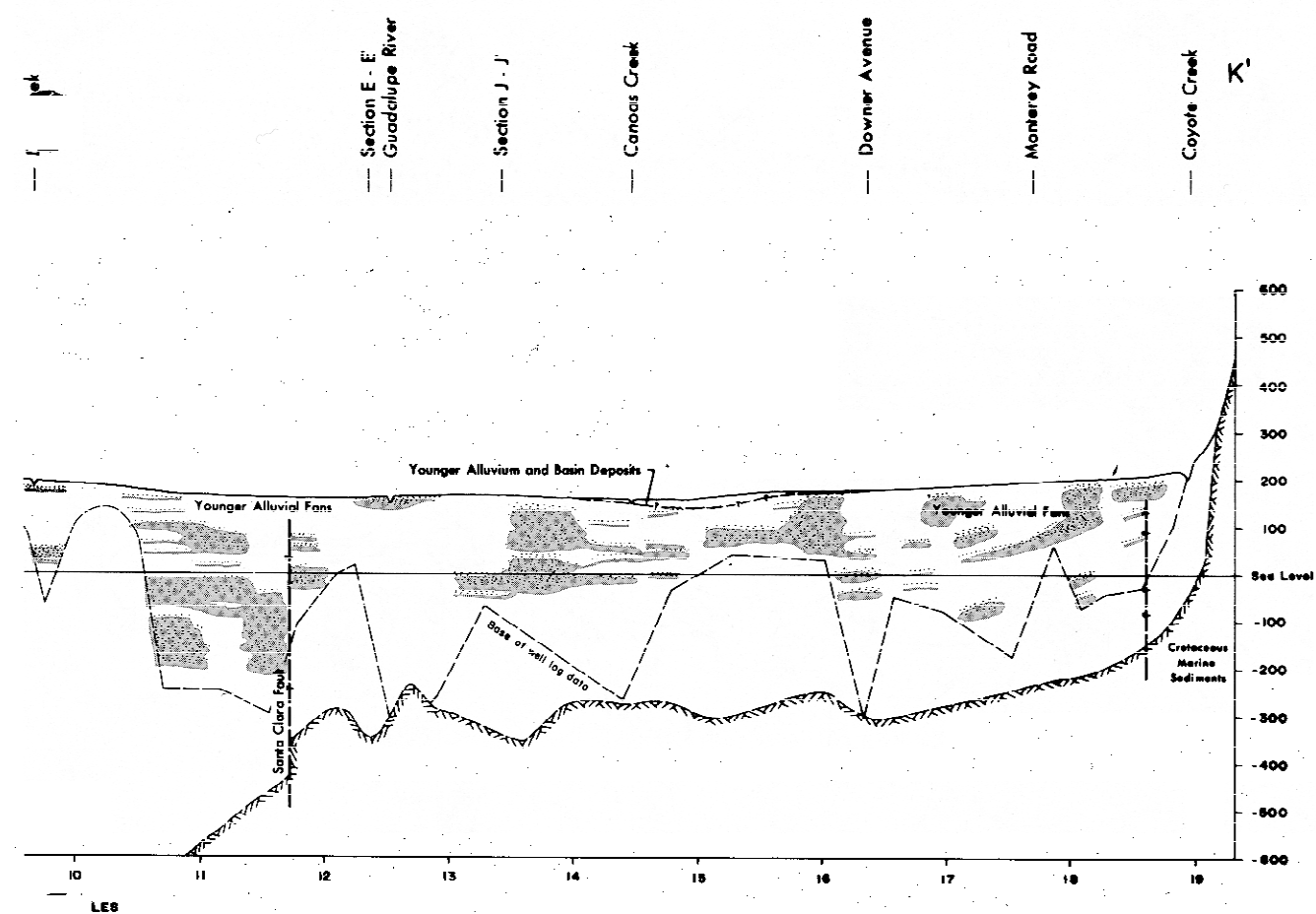
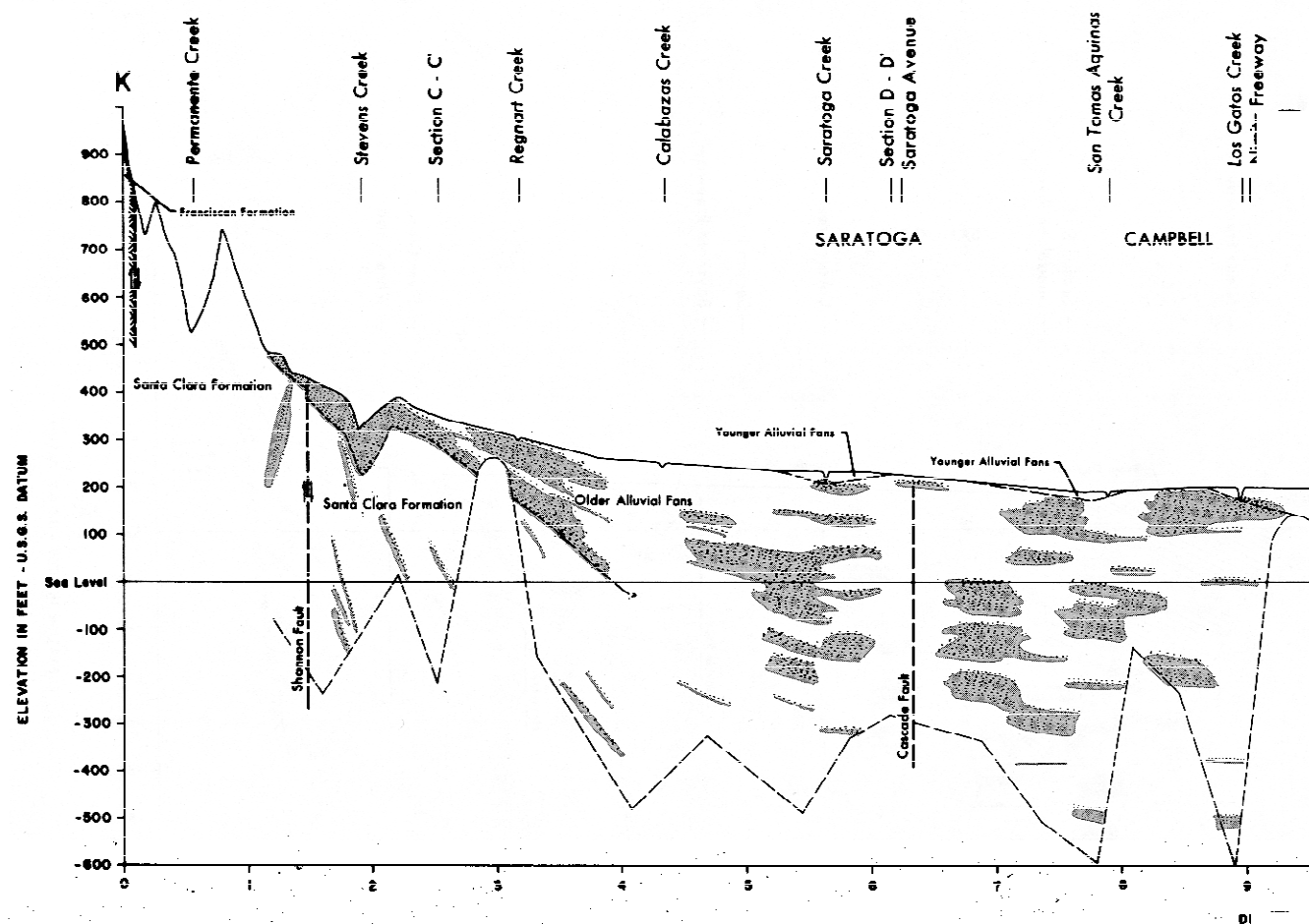
See Sheet 1 for location of section

SANTA CLARA VALLEY



LEGEND

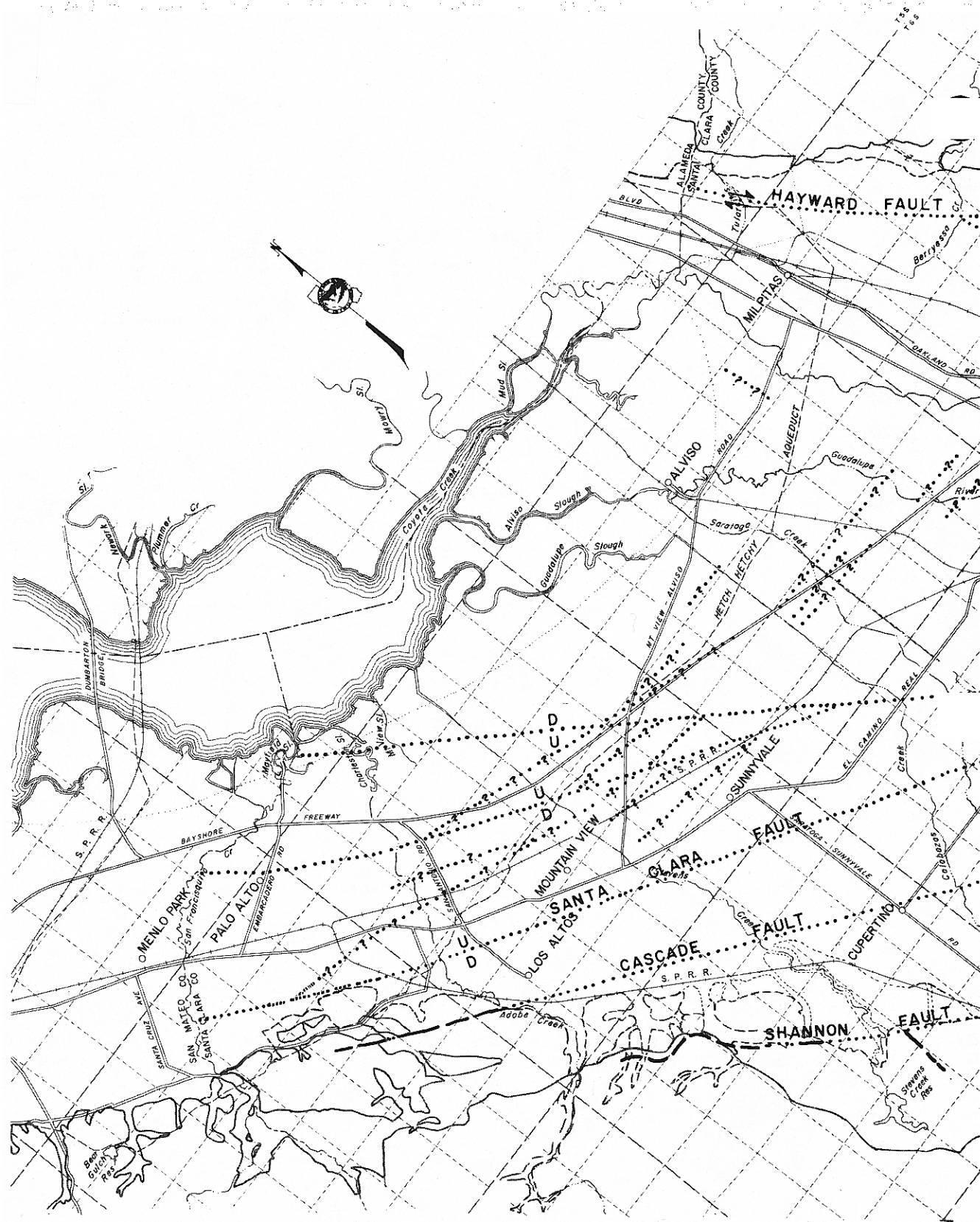
- CHANNEL DEPOSITS** Sand and gravel deposited by meandering streams; act as aquifers.
- OXIDIZED CLAY.** Yellow and brown clay formed during periods of continental deposition.



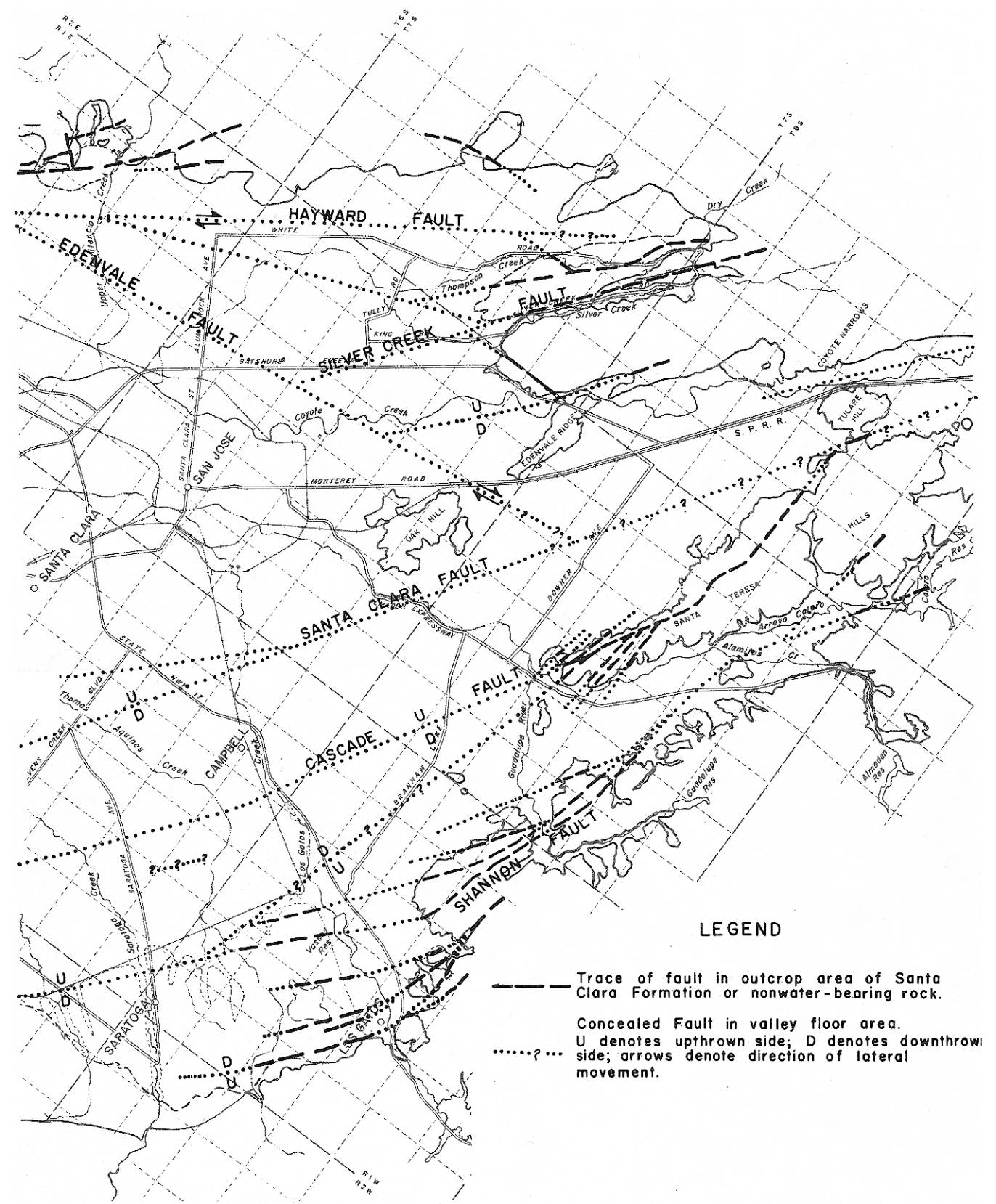
GEOLOGIC SECTIONS

See Sheet 1 for location of section

SANTA CLARA VALLEY



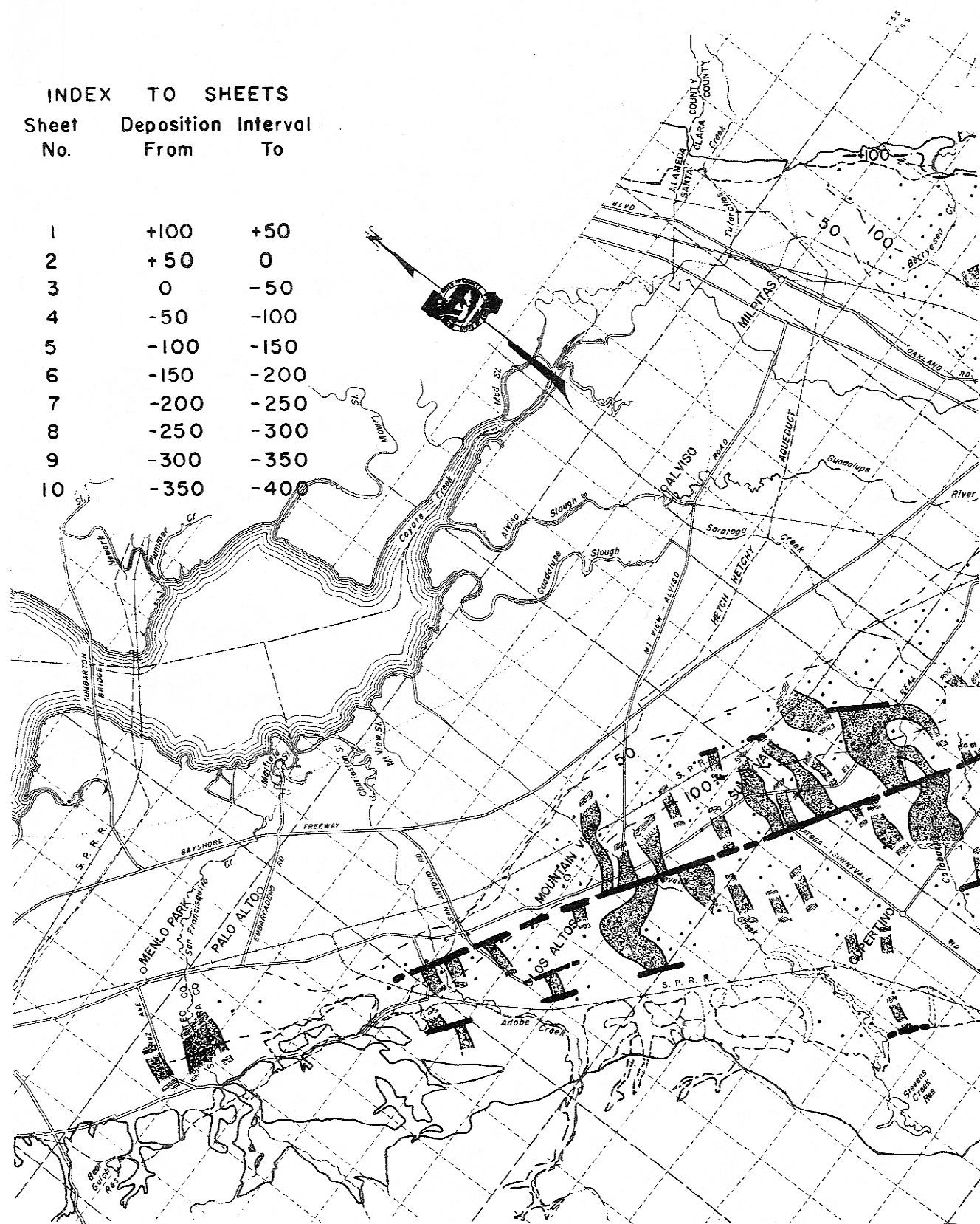
FAULT TRACES IN



SANTA CLARA VALLEY

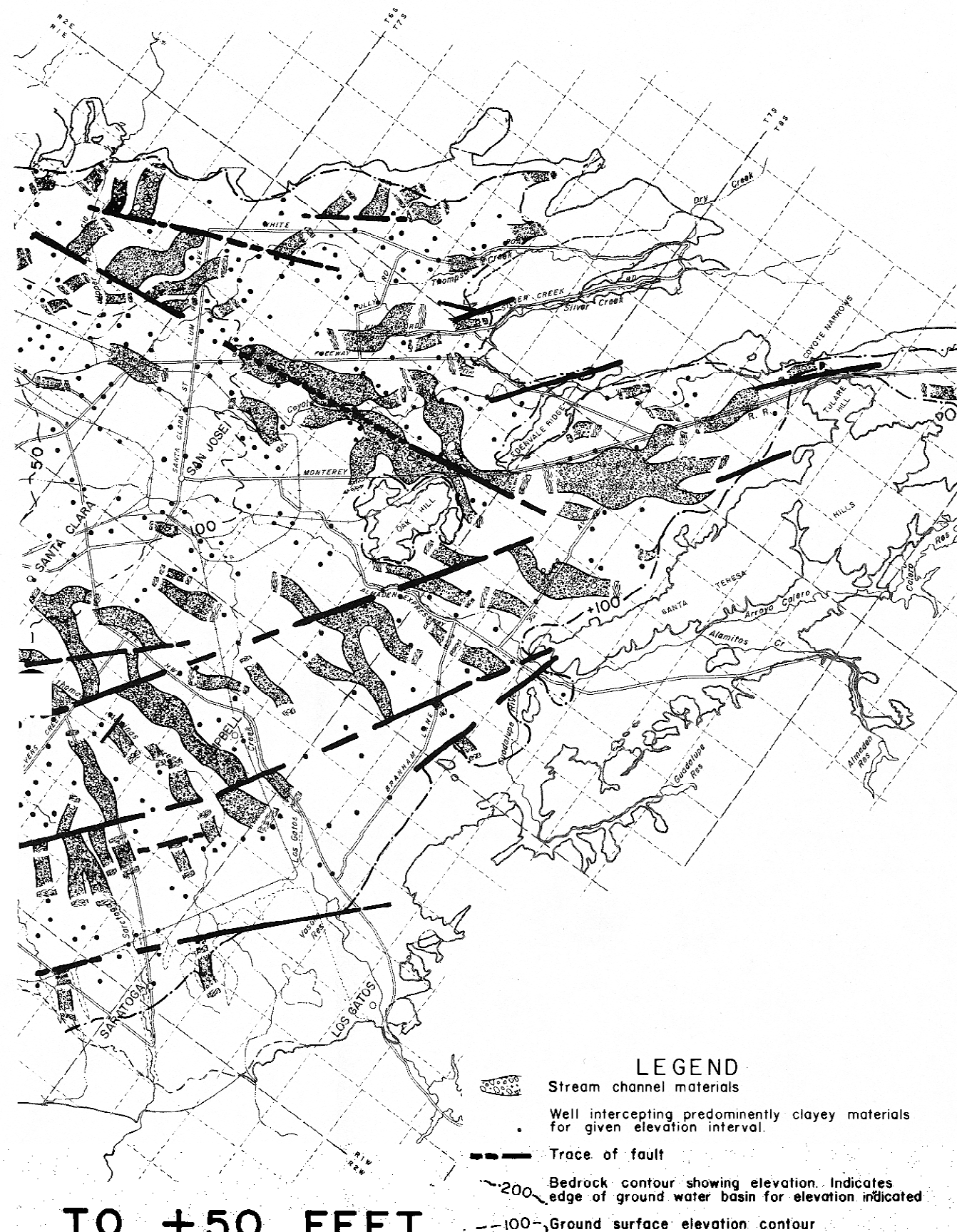
INDEX TO SHEETS

Sheet No.	Deposition From	Interval To
1	+100	+50
2	+50	0
3	0	-50
4	-50	-100
5	-100	-150
6	-150	-200
7	-200	-250
8	-250	-300
9	-300	-350
10	-350	-400



ELEVATION +100

SUBSURFACE DEPOSITION



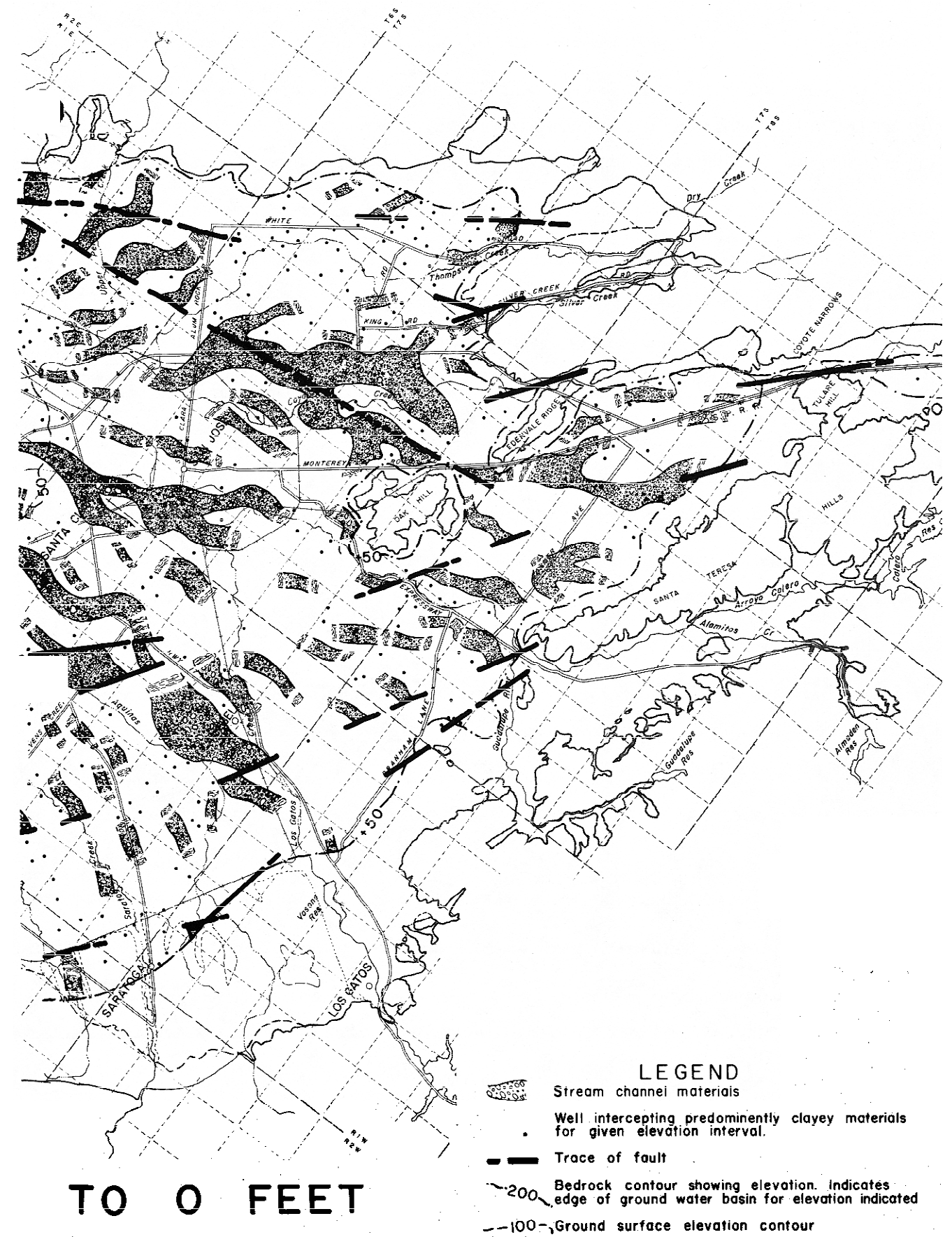
TO +50 FEET

SANTA CLARA VALLEY



ELEVATION +50

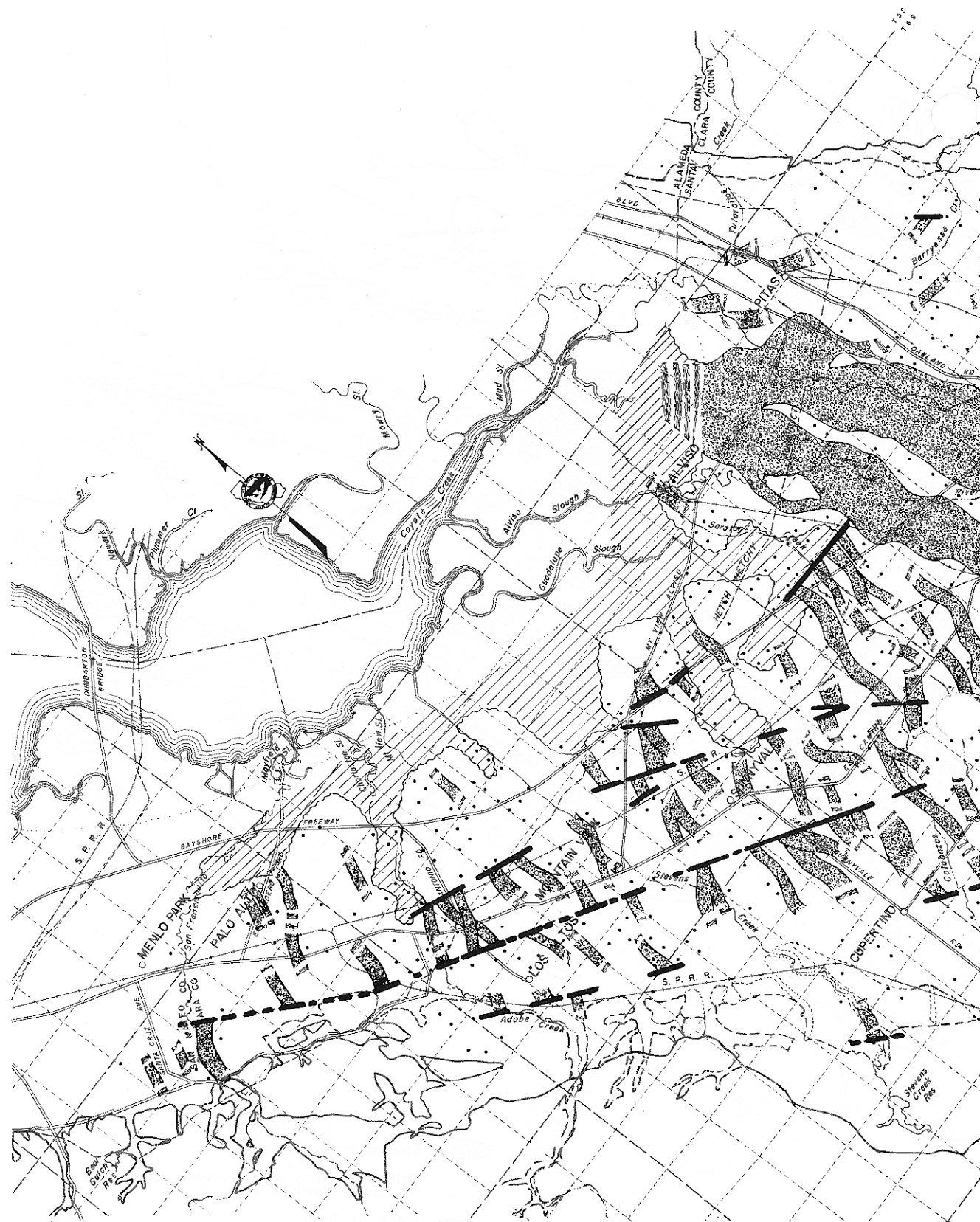
SUBSURFACE DEPOSITION



TO 0 FEET

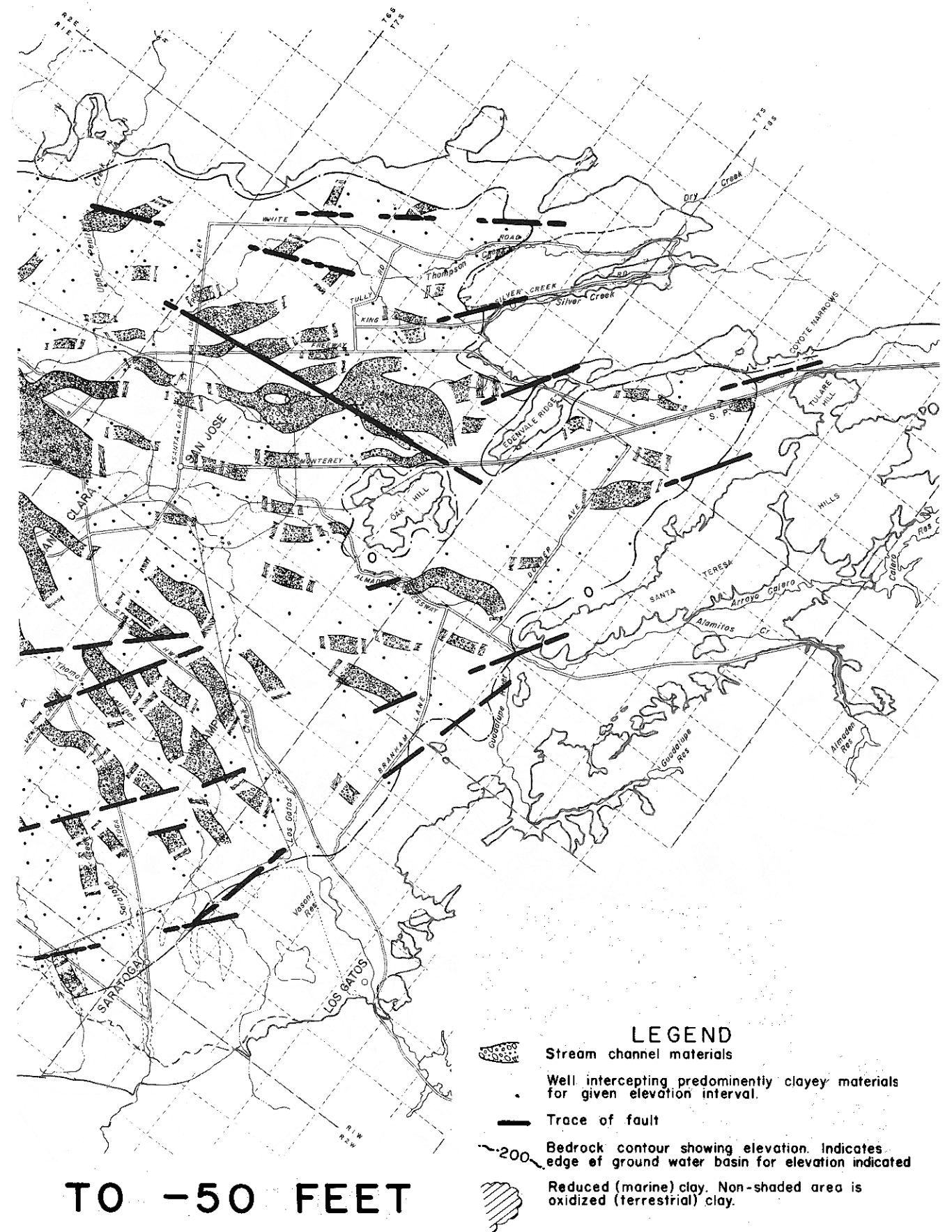
SANTA CLARA VALLEY

- LEGEND**
- Stream channel materials
 - Well intercepting predominantly clayey materials for given elevation interval.
 - Trace of fault
 - Bedrock contour showing elevation. Indicates edge of ground water basin for elevation indicated
 - 100- Ground surface elevation contour



ELEVATION 0

SUBSURFACE DEPOSITION



TO -50 FEET

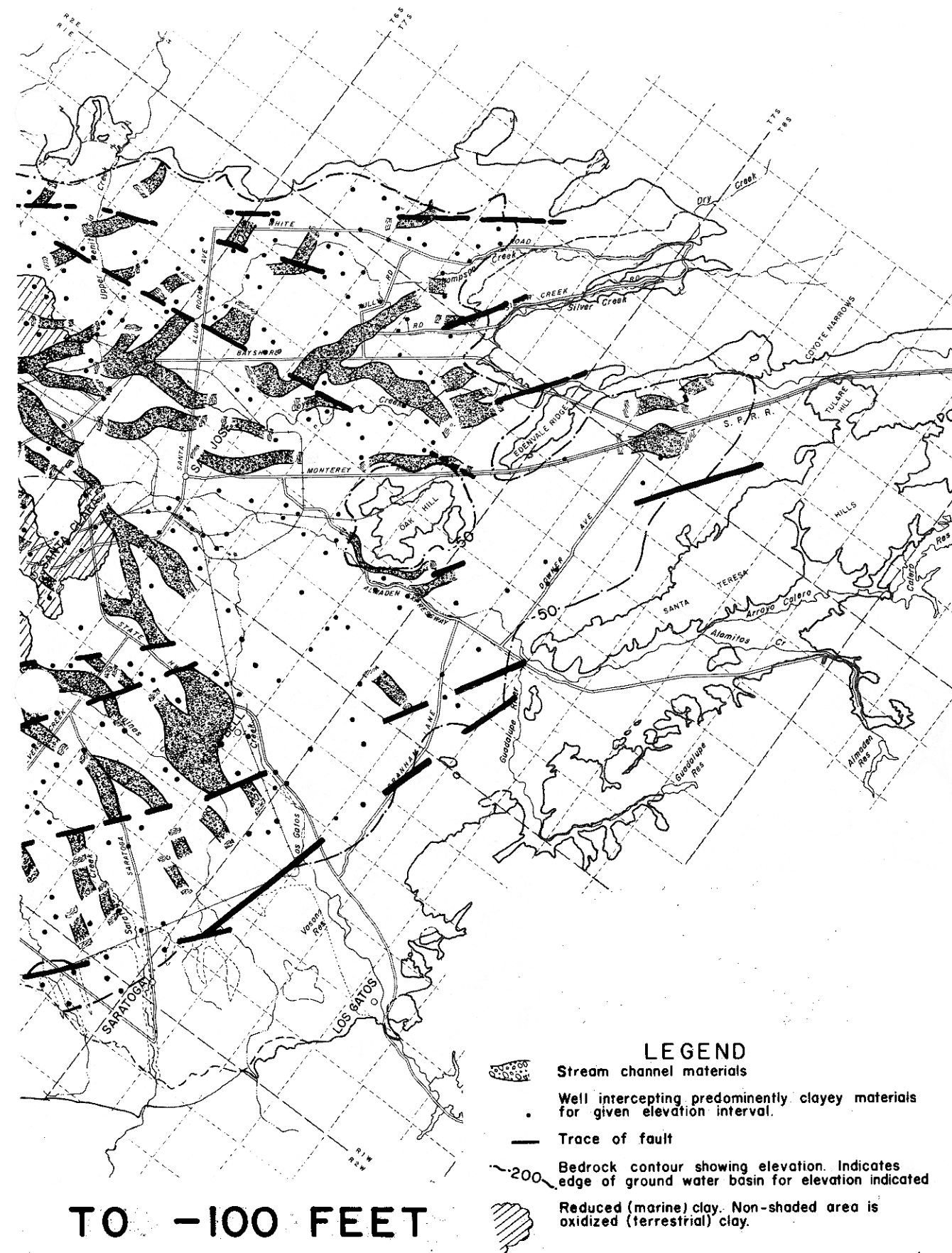
SANTA CLARA VALLEY

- LEGEND**
- Stream channel materials
 - Well intercepting predominantly clayey materials for given elevation interval.
 - Trace of fault
 - Bedrock contour showing elevation. Indicates edge of ground water basin for elevation indicated
 - Reduced (marine) clay. Non-shaded area is oxidized (terrestrial) clay.








ELEVATION -50

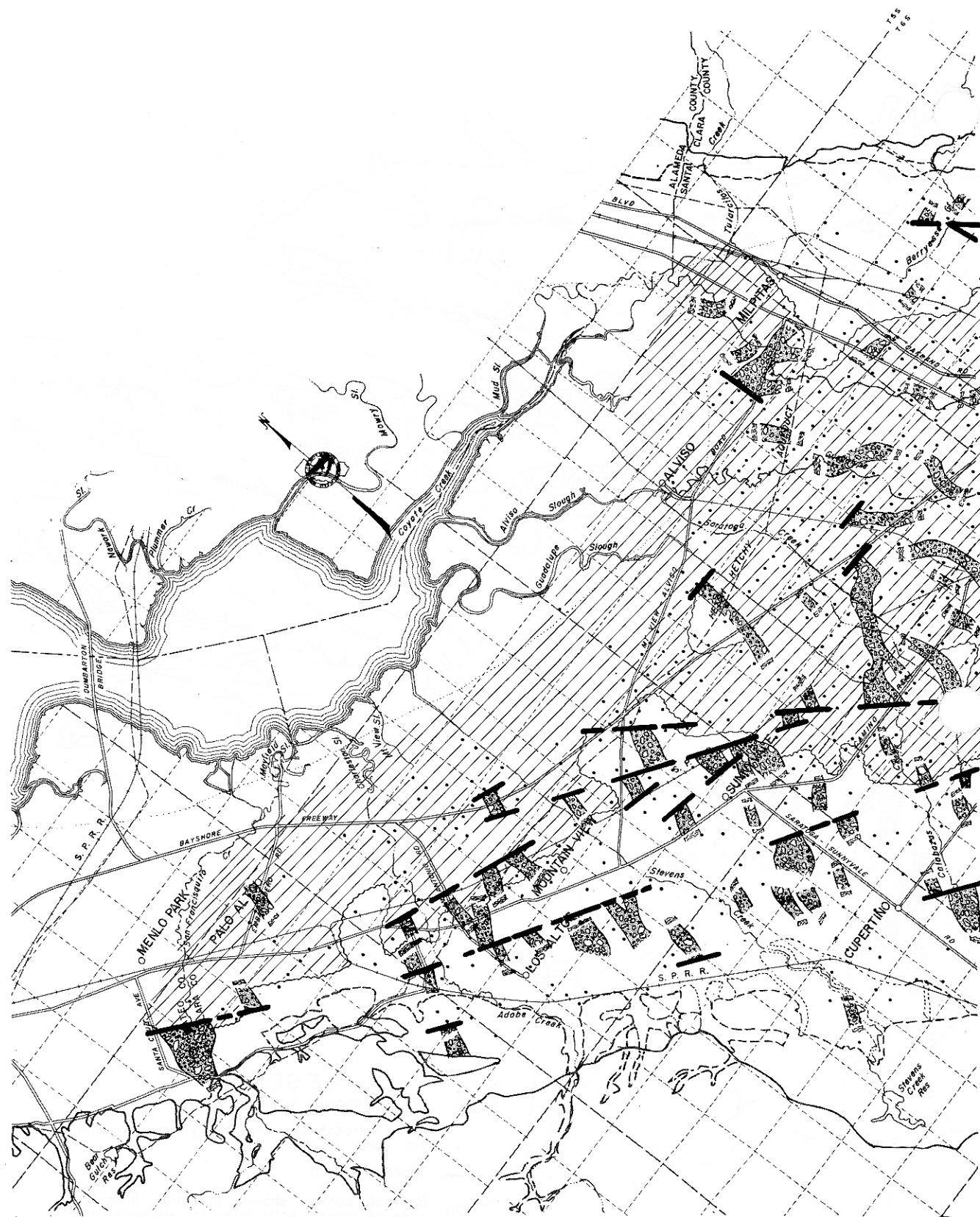
SUBSURFACE DEPOSITION



TO -100 FEET

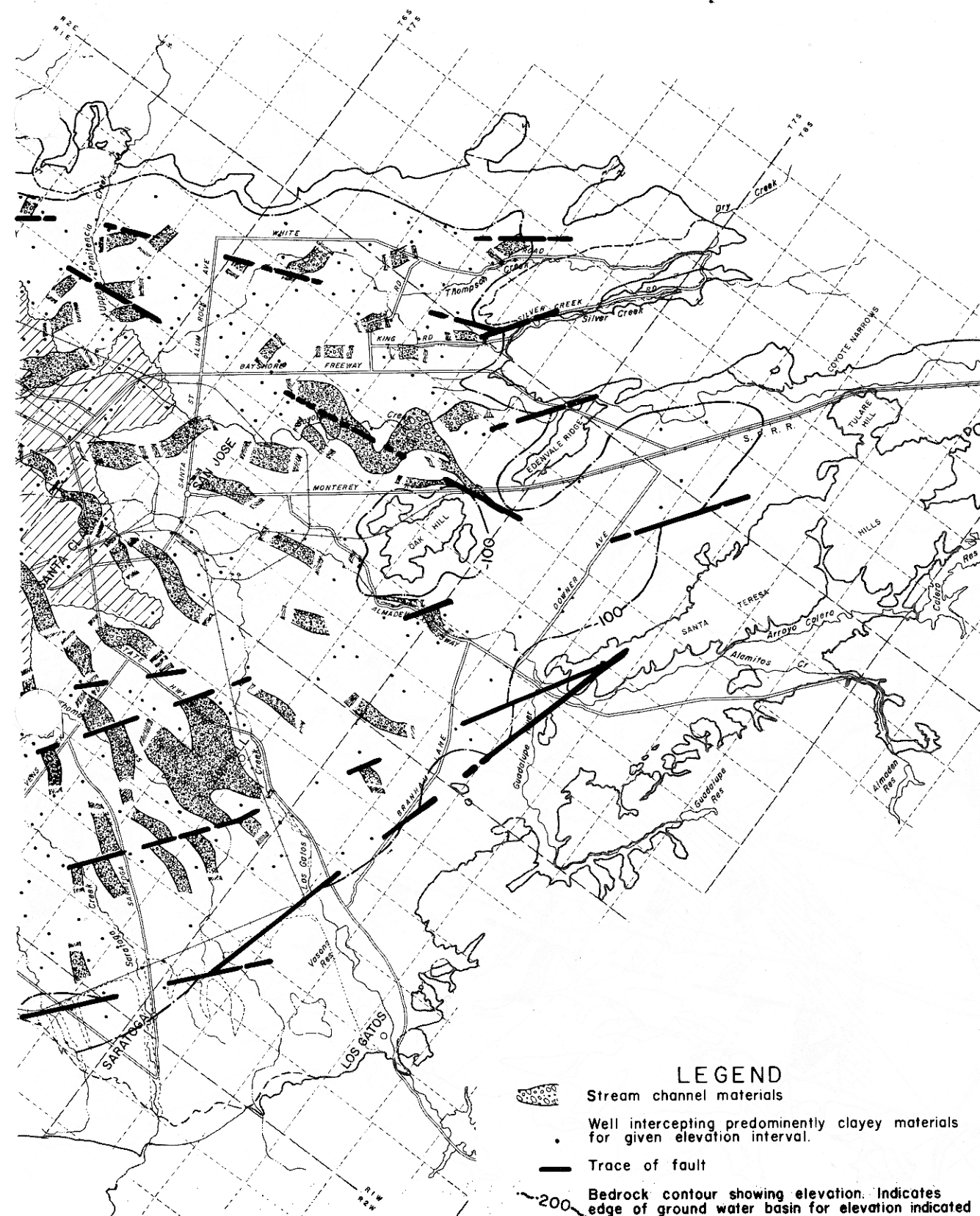
SANTA CLARA VALLEY

- LEGEND**
-  Stream channel materials
 -  Well intercepting predominantly clayey materials for given elevation interval.
 -  Trace of fault
 -  Bedrock contour showing elevation. Indicates edge of ground water basin for elevation indicated
 -  Reduced (marine) clay. Non-shaded area is oxidized (terrestrial) clay.








ELEVATION -100

SUBSURFACE DEPOSITION



TO -150 FEET

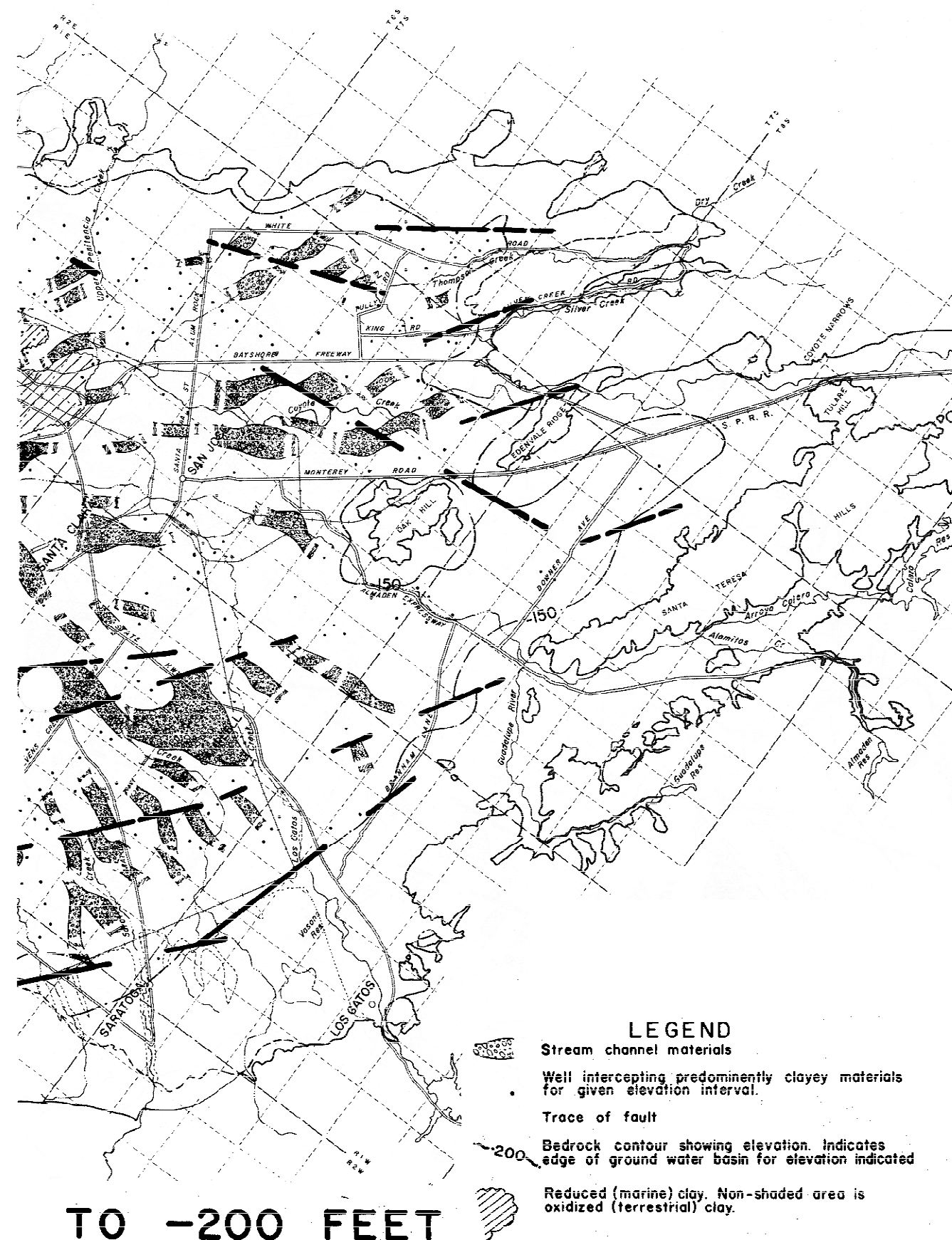
SANTA CLARA VALLEY

- LEGEND**
-  Stream channel materials
 -  Well intercepting predominantly clayey materials for given elevation interval.
 -  Trace of fault
 -  Bedrock contour showing elevation. Indicates edge of ground water basin for elevation indicated
 -  Reduced (marine) clay. Non-shaded area is oxidized (terrestrial) clay.



ELEVATION -150

SUBSURFACE DEPOSITION



TO -200 FEET

SANTA CLARA VALLEY

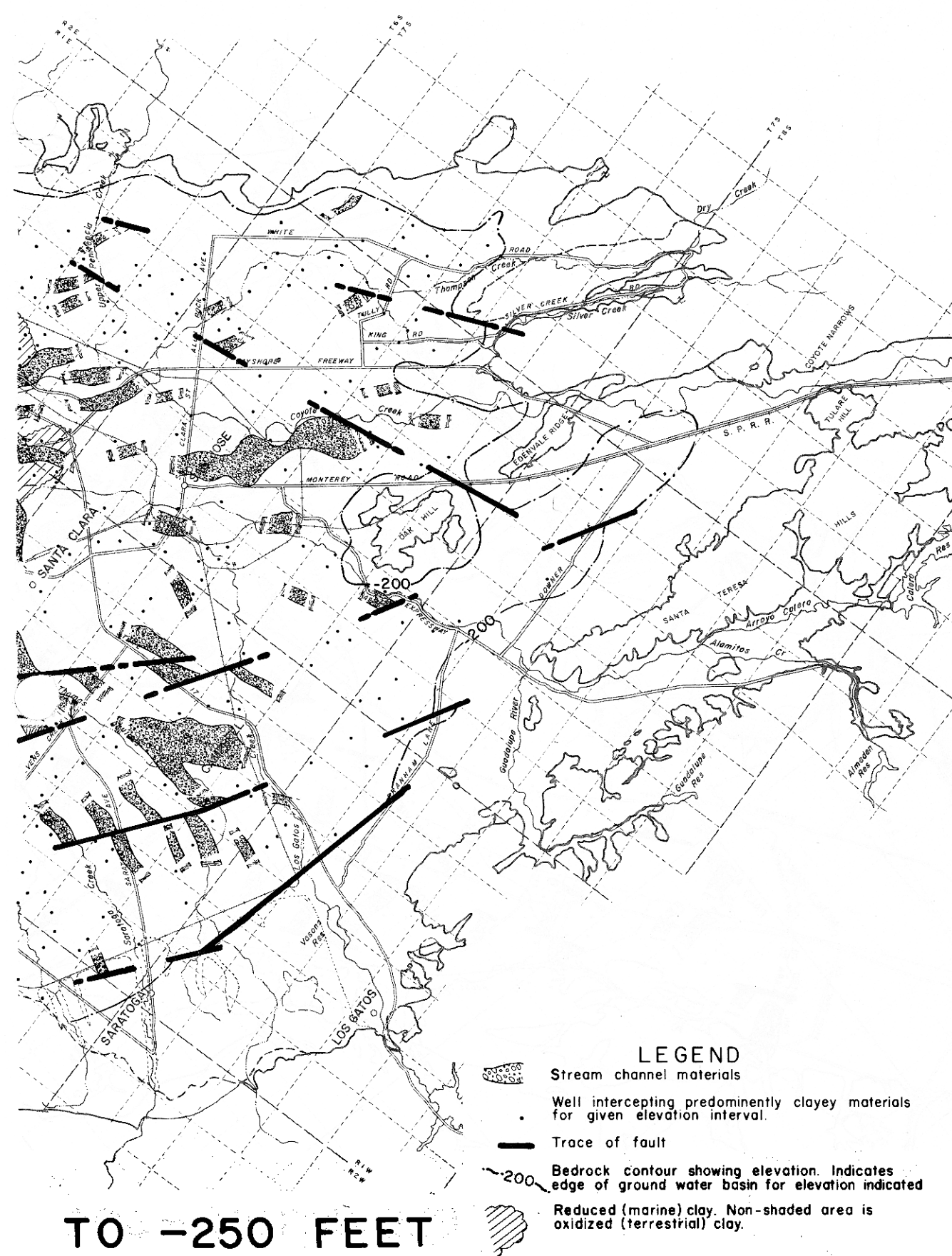
LEGEND

- Stream channel materials
- Well intercepting predominantly clayey materials for given elevation interval.
- Trace of fault
- Bedrock contour showing elevation. Indicates edge of ground water basin for elevation indicated
- Reduced (marine) clay. Non-shaded area is oxidized (terrestrial) clay.



ELEVATION -200

SUBSURFACE DEPOSITION



TO -250 FEET

SANTA CLARA VALLEY



ELEVATION -300

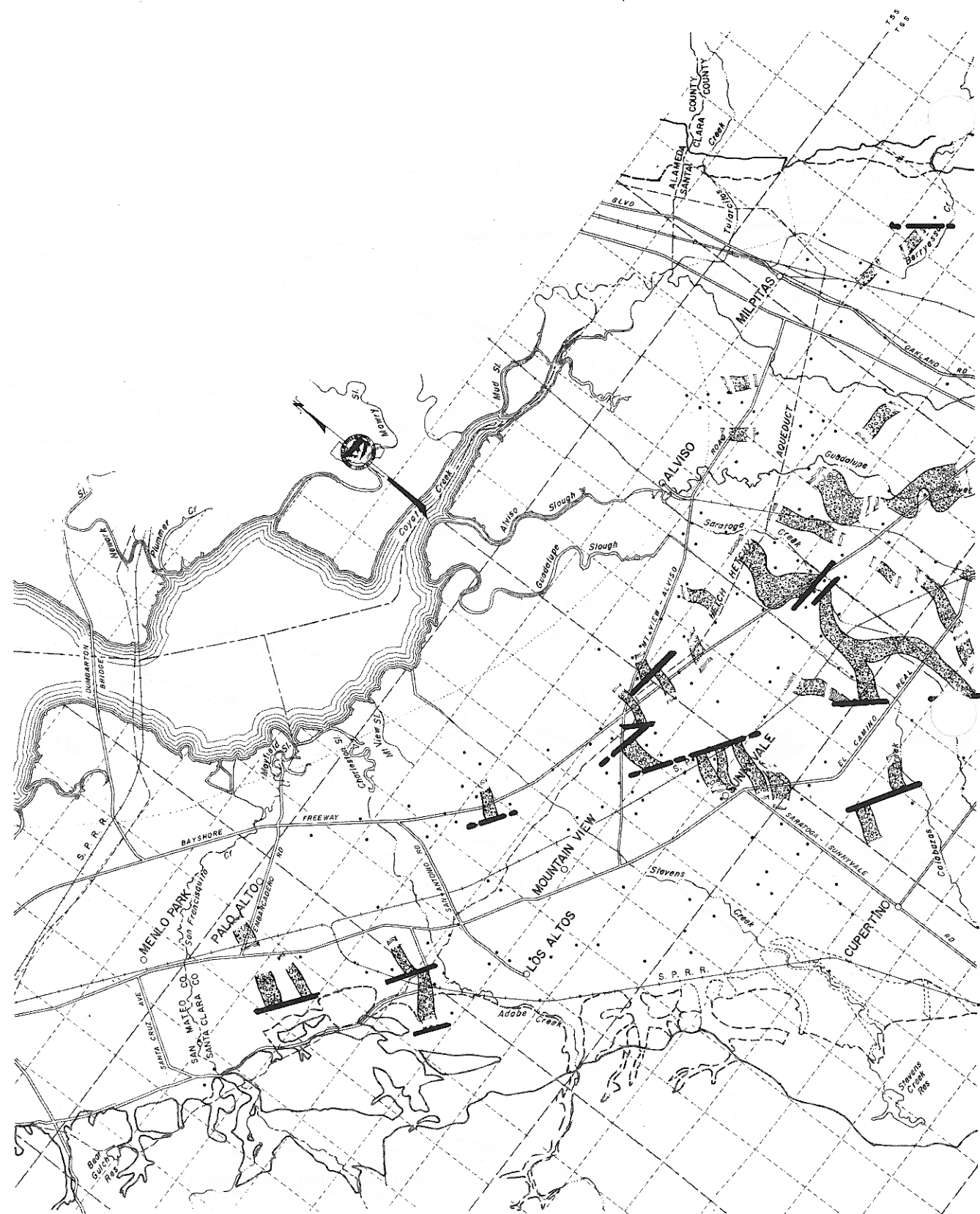
SUBSURFACE DEPOSITION



TO -350 FEET

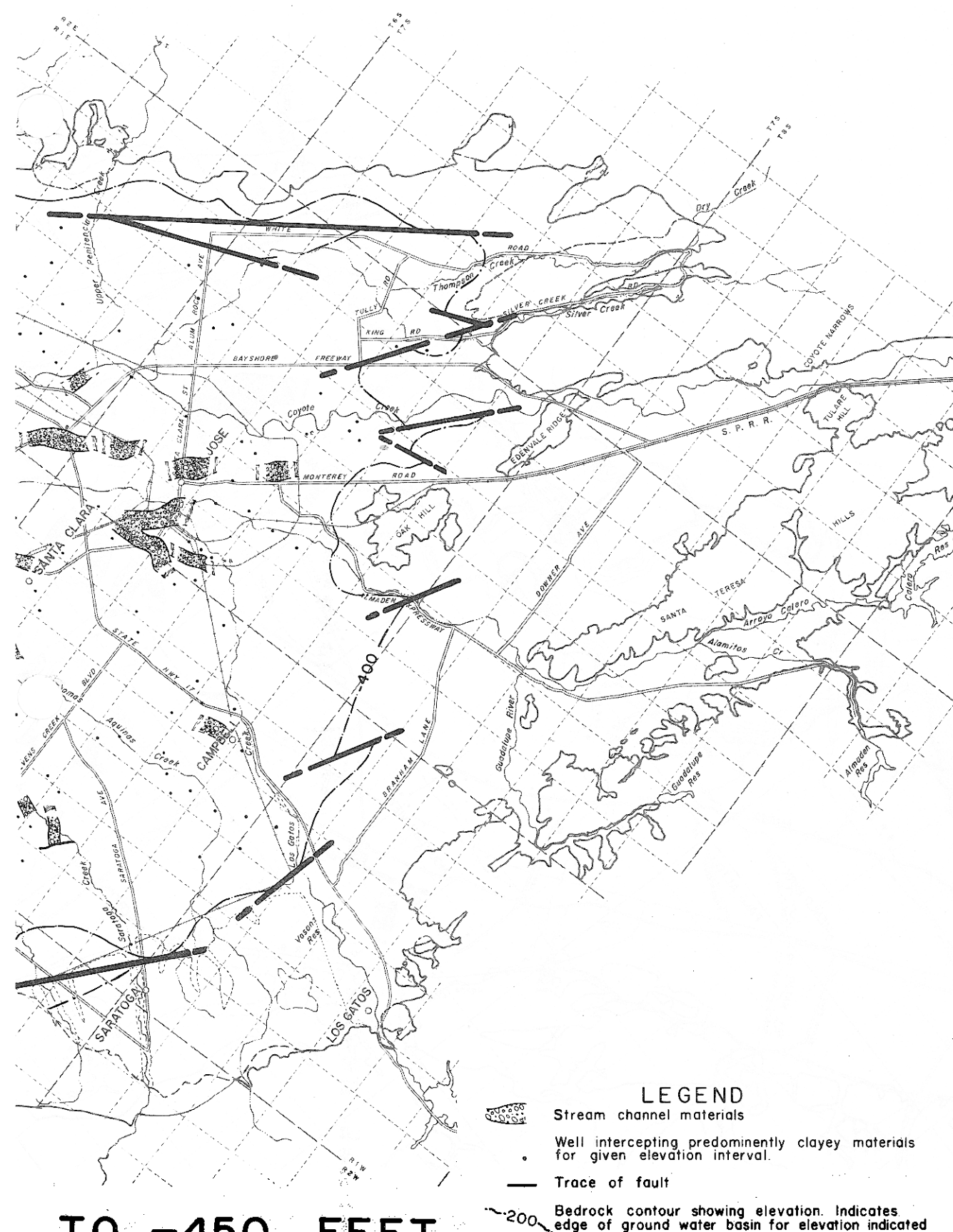
SANTA CLARA VALLEY

- LEGEND**
- Stream channel materials
 - Well intercepting predominantly clayey materials for given elevation interval.
 - Trace of fault
 - Bedrock contour showing elevation. Indicates edge of ground water basin for elevation indicated







ELEVATION -400

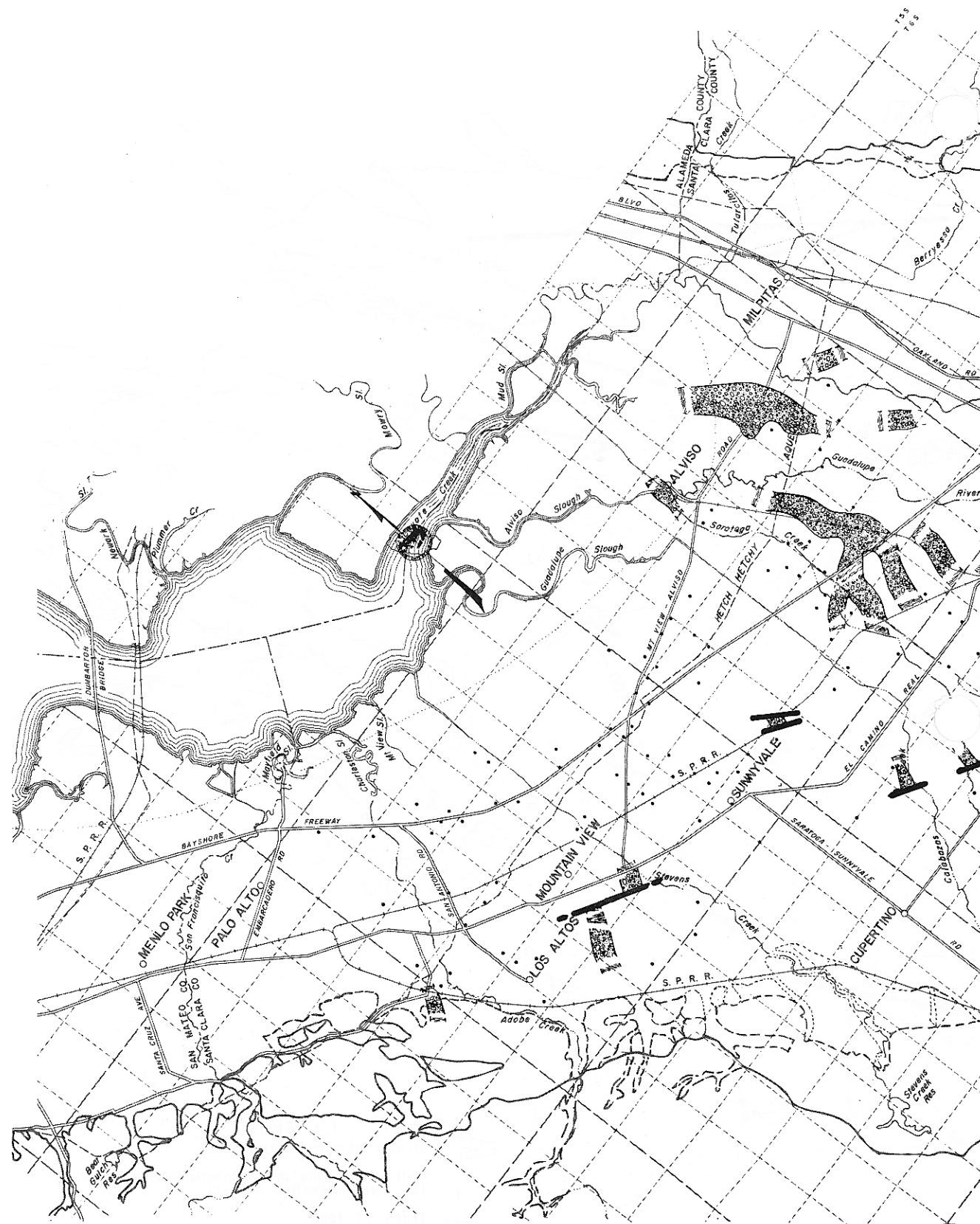
SUBSURFACE DEPOSITION



TO -450 FEET

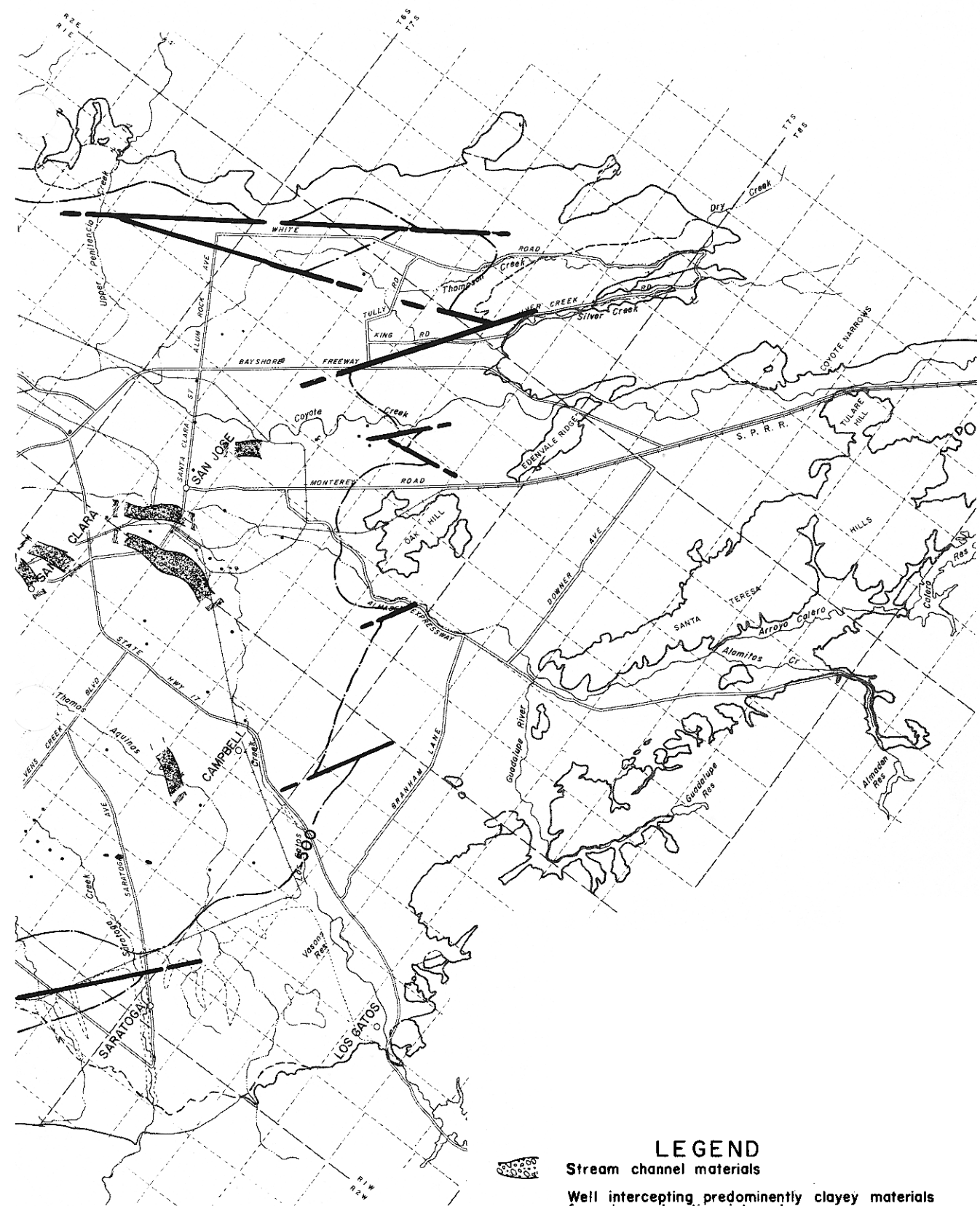
SANTA CLARA VALLEY

- LEGEND**
-  Stream channel materials
 -  Well intercepting predominantly clayey materials for given elevation interval.
 -  Trace of fault
 -  Bedrock contour showing elevation. Indicates edge of ground water basin for elevation indicated







ELEVATION -500'

SUBSURFACE DEPOSITION



TO -550 FEET

SANTA CLARA VALLEY

- LEGEND**
-  Stream channel materials
 -  Well intercepting predominantly clayey materials for given elevation interval.
 -  Trace of fault
 -  Bedrock contour showing elevation. Indicates edge of ground water basin for elevation indicated

CHAPTER IV. EVALUATION OF HISTORIC WATER SUPPLY AND DISPOSAL

The evaluation of the ground water system with regard to the acceptance, storage, and transmission of water is obtained by the development of an inventory of supply to and disposal from the ground water body. The ability of the system to store and transmit water under changing conditions can be evaluated by superimposing the works of man on natural hydrologic events such as precipitation, recharge, and consumptive use and then determining the reaction of the ground water system using the previously developed geologic information.

A ground water system can be described as many zones of gravel and sand separated from each other by zones of clay and having some degree of interconnection. This ground water system is only a portion or subsystem of the entire hydrologic system; the interrelationships of each part of the hydrologic system is shown schematically in Figure 6.

An analysis of the ground water system is made by using a specific historic period. The reference, or base, used in the ground water analysis is the amount of ground water in storage. This is derived by making an inventory on an annual basis using the assumption that water which percolates below the root zone will reach the ground water body during the same water year. The analysis is stated by the equation:

$$\text{Supply} - \text{Withdrawal} = \text{Change in storage}$$

The items of supply, or recharge, to the ground water body are derived mainly from the following:

1. Precipitation infiltrating to ground water.
2. Storm runoff, or streamflow, including imported water released into natural channels and adjacent ponds infiltrating to ground water.
3. Applied water infiltrating to ground water. Applied water includes both pumped ground and imported water put directly into water distribution systems.
4. Subsurface inflow from adjacent areas.
5. Water released by compaction of clay beds.

Withdrawals from the ground water body consist of ground water pumpage and subsurface outflow from the basin. From the values for each of the above items, the change in storage is computed as the annual volume of ground water gained or lost from storage. A negative value indicates a depletion of ground water in storage.

FIGURE 6

